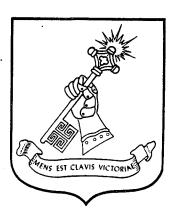
Dialectic Strategy

A Monograph
by
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Infantry



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This monograph sets forth a theoretical model for strategic analysis. The purpose of the paper is to determine how the components of a strategic plan relate to each other. It examines and critiques contemporary and classical definitions of strategy and then presents refined definitions for the components of a strategy and their inner relationships. The focus is on providing a balanced, holistic consideration of what strategy is and how to think about it.

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The monograph is significant as a theory for how to think about strategy, rather than for what to think. It provides a relevant model for analysts at any level of warfare. The model aims at providing an expanded, holistic perspective on strategy making and shows the strategist where there is opportunity for creativity within strategy making. It also assists the strategist in deducing the significant tradeoffs involved in strategic decision making.

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

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DIALECTIC STRATEGY

"In strategy prophecy may only be charlatanism, and even a genius is incapable of seeing how a war will unfold. But he must put together a perspective in which he will evaluate the phenomena of war. A military leader needs a working hypothesis."

--Svechin, Strategiia

Introduction.

Strategies often miscarry. Beginning with Cain's poorly devised plan to gain the approbation of God by murdering his brother, man has consistently failed to develop good strategy. From Hannibal's impressive but indecisive victories in Italy to Hitler's drive to subdue the Soviet Union through force of arms, soldiers and statesmen throughout history have made weighty decisions that went awry, causing both personal and national tragedy. In the face of careful deliberation and rigid determination, strategic plans often end in disaster or at least fall short of expectations. Man seems emotionally and intellectually predisposed to make bad strategic decisions.

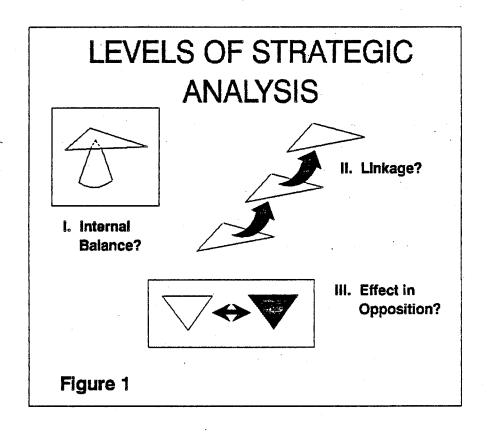
Long before the organized study of military art, leaders have sought to excel in strategy. The quest for good strategy pervades human history, ranging from desperate countrymen searching frantically for some way to repel an invader from their homeland to multinational councils planning a peacekeeping operation in an unstable world region. The desire for prevailing strategies in the past led to the consultation of oracles, to divination and sacrifice, and later to the creation of staffs and military schools. But the most important step in attaining a good strategy is first to understand what strategy is. Comprehension of

the whole of strategy is the sine qua non of creating a good plan, and it is a cognitive leap of the greatest importance for a military leader or a nation.

The struggle to understand and achieve winning strategy has led to the proliferation of systematic approaches to strategy. For example, strategy can be classified and studied according to the level of authoritative decision making it entails. From this perspective, various categories appear: coalition strategy, national grand strategy, and military strategy to name a few. 1 Alternately, the student can view strategy from the perspective of polarities -- e.g., sequential and cumulative strategies², direct and indirect strategies³, deterrent and combative strategies4, conventional and unconventional strategies5, counterforce and countervalue strategies. Again, the strategist can look at the problem with regard to the so-called "elemental" schools of strategy: continental, maritime, and aerospace strategies. But each of these approaches is oriented on a given outcome; each points to a certain type of strategy that hopefully will prevail over another. is missing is a methodology for both analyzing and synthesizing strategy--a methodology that has no particular form of strategy in mind. In other words, modern strategists have an abundance of advice on what to think; what is lacking is solid direction on how to think.

Contemporary strategists require a method for navigating the complexities of strategic decision making. Like Odysseus trying to find his way back to Ithaca, modern strategic thought seems suspiciously at the mercy of the gods. The resulting chaos makes for high adventure and good reading, but it delivers little meaningful progress in strategic thought. This paper seeks to provide a theoretical model that enables

manner concerning strategy. The author's goal is to furnish future students a workable model that will provide a disciplined approach to taking a strategy apart and examining its various components. If used correctly, this theory will be able to examine any of the types of strategy classified above. It will enable the student to "pick up" a plan or formula and examine it from various angles in order to gain new insights.



The Three Levels of Strategic Analysis.

When considering a plan put forth by a coalition, nation, army, or even a commercial business, it is tempting for the analyst to infer a particular pattern or trend and quickly pronounce his verdict: this is

a good or bad strategy. But in order to thoroughly understand and appreciate a given strategy, the analyst must view it from at least three quite different perspectives. (See Figure 1.) That is, there are at least three methods by which a person can evaluate a strategy. First, he can analyze the strategy internally--i.e., he can examine each of the components of the strategy and the relationships among the components in order to see if the strategy has balance within itself. Secondly, he can look at how the strategy as a whole is related to other friendly strategies--i.e., he can see if it links properly to superordinate and subordinate strategies, as well as to other related friendly strategies. Finally, he can view the strategy in relation to its opposition -- i.e., comparing the friendly strategy with the enemy strategy. Thus, there are three standards by which a strategy can be judged: internal balance, external linkage, and effectiveness against opposition. Each of these perspectives is critical in thoroughly evaluating a given strategy.

When the analyst considers a strategy from these three angles, he is likely to find that it is a good strategy in some respects, while it is lacking in another. For example, a given plan might be linked effectively with other friendly strategies and be effective against the enemy's plans. Yet it still might be wholly inappropriate because it lacks internal balance. Or a strategy might have balance and good linkage but be inadequate when pitted against the enemy's opposition. The goal for the strategist, of course, is to develop and pursue a plan that successfully passes all three levels of analysis. The first step in attaining this success is to understand the analysis methodologies.

This monograph focuses on the first level of strategic analysis. The purpose of this monograph is to define strategy holistically by constructing a theoretical model that properly shows the relationships among the components within a strategy. In other words, this paper offers a theory for the first stage of strategic analysis as described It is aimed at applying intellectual rigor to the pursuit of balance within a strategy. It will not directly address the second and third levels of analysis, although each of these levels is vital in strategic understanding. As for the scope of this essay, it defines not simply strategies, but rather strategies of conflict. Hence, throughout the discussion, the underlying assumption is that the context of dynamic strategy making is one of interaction and opposition. Further, it is important to understand that while the paper concerns strategy, it is by no means confined to the strategic level of war. Rather, the conclusions found herein are intended to apply to any level of strategic decision making--indeed, even to competitive decision making in the business world.7

In order to develop an holistic strategic model, this essay will first isolate the components of strategy by referring to past classical treatises as well as to contemporary doctrine. Next it will develop and discuss the dynamic relationships among the components of strategy. Thirdly, the essay will explore the dialectic nature of strategic components. Finally, the essay will enumerate some of the insights into strategic analysis that the dialectic model provides. It is important to note that while this methodology includes a survey and description of past strategic theory, the conclusions and viewpoints within the dialectic strategy model are unique—that is, they represent a

deliberate departure from past ideas in certain significant areas.

Hence, this monograph is in part a research paper and in part a new theory.

There is an urgent need for a theoretical model that defines the components of strategy and the relationships among them. As will be seen, the identity of the components is commonly understood though not fully expounded upon in our doctrine. But the relationships among the components and the theoretical implications of those relationships have heretofore only been hinted at. As a result, modern strategists or students of strategy routinely fail to think holistically about strategy. Further, because strategists fail to master the key relationships among the components of strategy, they instead take refuge in 'principles' or other forms of prescription—a dangerous and usually futile practice. The solution for such intellectual bankruptcy is the assimilation of a useful theoretical model that shows the vital tradeoffs, constraints, and opportunities of strategy.

Ends, Ways, and Means.

Probably the most common understanding of the term 'strategy' is that it is 'a careful plan or method'. When Americans think of strategy, they most often consider it to be a plan of action—something that is performed. Nevertheless, in military usage, this common understanding of strategy tells only one-third of the story. Strategy is not simply a plan describing what a nation or person will do, but it also accounts for what the end state will be, and what resources are required or available to attain the end state. In other words, the three components of strategy are ends, ways, and means.

Strategic Ends.

The ends of strategy describe the desired goal, objective, or endstate. There are subtle distinctions among these synonyms for the ends,
but the important point is that the ends of strategy articulate the
purpose of the strategy. In short, the ends describe what will be
accomplished. It is clear, then, that the ends of strategy provide the
basis for measuring success or failure. Rather than viewing the pace of
friendly activity (the 'ways' of strategy) or the loss of resources
inflicted upon the enemy (the 'means' of strategy), our theoretical
model looks at the ends to define success.

The strategist derives the ends of a strategic plan from a variety of sources, including his own imagination. At the lower planning levels of war--the tactical and operational level--the end-state, objectives, and purposes of a higher headquarters' plan are found in the superior headquarters' operations order. Specifically, the mission and commander's intent provide (or should provide) a clear description of the ends. At the strategic level of war, the ends are usually determined outside the military institution. Clausewitz insisted that ultimately, the ends of strategy are derived from national policy. 10 Regardless of the source of a higher authority's ends, the strategist at every level must understand that the higher headquarters' ends are not simply translated verbatim down the chain of command. Rather, each level of command creates its own strategic ends. While this expression of creativity must link to higher ends, it should not be slavishly imitative of them. Indeed, practical experience suggests that often higher headquarters or national governments forego a clear expression of

ends, in which case, the strategist must employ his creativity and infer a proper strategic end.

Strategic Ways.

The ways of strategy describe what will be done. Synonyms for strategic ways include concepts, methods, or plans of action. 11 In a word, strategic ways are the 'verb' of strategy. It is easy to see how one can confuse the ends and ways of a given plan. In practice, it may be difficult to distinguish between what will be accomplished (the ends), and what will be done (the ways). As an example, the student might view deterrence as the ends of a strategic plan. In other words, it would seem that the desired end-state in a strategy of deterrence is the prevention of war. In reality, deterrence is a method, not an end. It describes a concept in which one side seeks to dissuade the other of resorting to war. But the ends of such a strategy may be difficult to discern, because they are implied rather than stated. A nation might wish to deter war with its neighbor because it wants to maintain the current balance of power, economic relationship, or cultural arrangement. The ends of deterrence are thus often the political, economic, or cultural status quo, or at least the continuation of peaceful competition toward some other end-state.

As with the development of ends, the strategist applies creativity to the selection of ways. Obviously, there are constraints and restraints upon the creative process. The strategist may not, in most cases, pursue courses of action that don't link properly with those employed by higher headquarters. To take an extreme example, if the National Command Authority decides to launch a conventional ground

invasion of an enemy state, the responsible CINC could not then develop ways that feature a preemptive nuclear preparation of the objective.

Such methods would not have linkage with higher headquarters' methods.

Constraints are defined as those tasks that the subordinate headquarters must accomplish. Restraints or restrictions are those actions that are prohibited. But within the bounds of stated or implied restrictions, the strategist applies art and creativity to the development of his strategic concepts.

Strategic Means.

The means of strategy are the costs of the plan. They can include tangible costs, such as money, lives, or minerals; and they can include intangible costs, such as time, political will, or national morale.

Some strategic means may be renewable, such as money or political influence; some may be unrenewable, such as lives, time, or mineral wealth. Finally, the strategist must examine the means of a strategic plan in terms of means available as well as in terms of means required. Usually, military planners will generate requirements for means (operating money, equipment, people) based on a given set of ends and ways. The government will usually respond with a constrained list of means available. The military planners must then adjust the ways and perhaps the ends of the strategic plan to account for a decrement. The United States budgeting process provides a forum for determining strategic means.

As with the other components of strategy, the development of means offers room for creativity and art. Even a cursory reading of Napoleonic history reveals that the marvelous methods employed by the

legendary French leader were enabled by the equally creative and effective generation of means. Napoleon's successes in Italy, Austria, and Prussia owe as much to the levee en masse as they do to la manoeuvre sur les derrières. The innovations Lazare Carnot and others provided new and revolutionary forms of resourcing the fight. By working out new ways to fuel a strategy with cost-effective means, contemporary strategists can propel the ways and ends with greater effect and success. Further, there is opportunity for creativity not only in the generation of means, but in the organization of them as well. Hence, the creative art of strategy making embraces the means as well as the ends and ways.

Carl von Clausewitz perceived the three-element framework of strategy, although he implied rather than stated the concept. 13 As we will see below, Clausewitz developed his insights into the threefold nature of strategy through his application of Hegelian dialectic logic to the problem.

More recently, contemporary writers have emphasized that strategy consists of ends, ways, and means. Colonel (ret.) Arthur F. Lykke, Jr., a professor at the Army War College, noted that the term "strategy" was used loosely even among professional military officers, pointing to the need for a more precise approach. He insisted that a complete understanding of strategy is founded upon a comprehensive definition. To that end, he defined strategy thus: "Strategy equals Ends plus Ways plus Means". 14

The army's official doctrine also acknowledges this strategic construct:

The theater strategy is written in terms of military objectives, military concepts, and resources (ends, ways, and means) and provides guidance for a broad range of activities throughout the AOR [area of responsibility], including provisions for both war and operations other than war. 15

A hierarchy of strategy provides strategic direction in theater: National security strategy, national military strategy and theater strategy. These strategies integrate national military objectives (ends), national policies and military concepts (ways), and national resources and military forces (means) to achieve national objectives. 16

Strategic Creativity.

while warfare itself is fundamentally a destructive act, strategy making is creative. There are obviously aspects of strategy that are scientific and analytical. But the creation of a strategy ultimately requires art—the putting together of diverse elements into an integrated whole. Both the science and art of strategy are vital to success, and both require clear doctrine and flexible theory to thrive in the modern world.

One of the motivations behind this paper, however, is that in the author's opinion, the art of strategy—the creative aspect—suffers from a lack of well-developed, comprehensive theory. While many contemporary writers acknowledge the creative aspect of strategy, they invariably apply the creativity idea only to the development of strategic ways, ignoring the creative potential for ends and means. Clearly this was Clausewitz's paradigm, as we will see in more detail below. He considered—from the military commander's point of view—that the strategic practitioner in war had maximum freedom in developing strategic ways, methods, and concepts, but little room for manipulating strategic ends and means. Hence, Clausewitz's theory (the foundation for most modern strategic theory) sees room for creativity and art only

within strategic ways. This paper suggests that with respect to creativity, it is time to "liberate" ends and means, and to put them on an equal footing with ways. Strategic creativity must apply to the whole of strategy—ends, ways, and means. In order to facilitate creativity among all three components of strategy, it is necessary to examine and define the relationships among the components. For this reason, the theoretical approach taken in this essay assumes a sort of equality among the components and relationships of strategy. Rather than proceeding from a discussion of the qualitative differences among the strategic components, we will examine strategy from the perspective of theoretical similitude among them. We will determine whether the components and relationships can usefully be viewed as theoretically coequal.

In the application of the theory to practice, of course, the balance of creative potential will be lost. In a modern nation—and in the United States especially—no one strategist nor group of strategists can have unlimited creative freedom among all three components. Indeed, it is fundamental to the American Constitution that strategy making be a shared power. Even at the lower levels of command, where unity of command ostensibly exists, creative license has restrictions. Thus at any given moment, a strategist trying to apply this theory may find that he has maximum freedom in developing strategic means, but little or no control over ways or ends. Alternately, he may have great freedom in generating ways, some input into the articulation of ends, but no control over means. Hence, in practice, theoretical balance is lost. Nevertheless, the balance exists throughout the whole of strategy making, even if each segment of it is specialized. It is important to

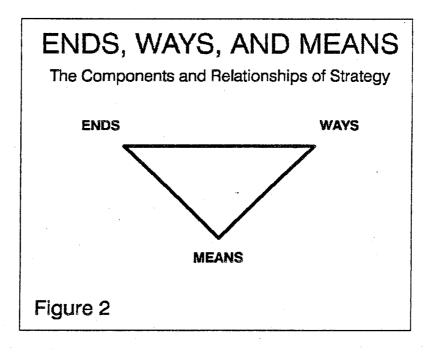
understand that balance even if the strategists cannot control the whole process. By understanding the tradeoffs involved in strategy making, he can better evaluate the effects of decisions made by others.

The Relationships.

Having established the trichotomous nature of strategy, the next step is to investigate the relationships among the three components. Since there are three components, logic instructs us that there are also three distinct relationships within a strategic plan: the relationship between means and ways, the relationship between ends and means, and the relationship between ways and ends. For this reason, it is useful to think about strategy using a simple triangular figure. See Figure 2.

Later we will examine the nature of the three relationships of strategy, and we will give a name to each. However, it is first necessary to establish the significance of the relationships. A key concept in good strategy making is that the relationships of strategy are more important than the actual components. In terms of our triangular model, the strategist must comprehend and master the sides of the triangle rather than the points. This can be a difficult endeavor, because almost all writings on strategy in the past have focused on the tangible components rather than on the more subtle relationships.

The danger in strategy making is to take shelter in principles and prescriptions. In our model, we might suggest that a strategist who does not master the *relationships* of strategy, which are found along the lines, instead embraces an "angular" bias—a preoccupation with prescriptions concerning the points of the triangle: ends, ways, or means.



For example, to insist that effective strategy always requires the destruction of the enemy's armed forces is to reveal an isolated, prescriptive viewpoint concerning the ways of strategy. In reality, such destruction may be ruled out of a given strategy because of the required end-state (such as in Operation Just Cause), or because of a lack of means (such as in the Cold War). In coalition warfare, some partners within an alliance may be less willing to annihilate the enemy than others (as in Operation Desert Storm). Hence, when confronted with prescription concerning strategic ends, ways, or means, the wise strategist will immediately consider the implications of those ends and the relationships they have with the ways and means of the strategy.

The acme of the art of strategy is to master the linear relationships among the ends, ways, and means rather than concentrating on the components themselves. As the United States Naval War Collège staff concluded in a 1942 study of strategy:

The foundation of this philosophy and of the system for its practical utilization rests on the concept of *relative* or *proportional* values. In the military environment, change, rather than stability, is especially to be expected, and the *relationships* existing among the essential elements of a military situation are, in fact, the significant values.¹⁷

Field Marshal Sir William Slim once stated that a field commander must be a keen judge of "administrative risk". 18 The British use the term "administrative" to mean "logistical". Hence, Slim was advising future commanders to become adept at judging logistical risk. In terms of our model, we can apply the field marshal's advice by looking to the line (i.e., the relationship) between means and ways. Slim was advising his audience that one of the keys to good generalship is to understand the relationship between means and ways. Rather than take shelter in so-called principles or imperatives, the successful strategist understands that each component of strategy must achieve balance in two relationships—the two lines that connect it to the other components of strategy.

Risk.

By contemplating the relationships among the components of strategy, the role of risk in strategy making becomes clear. Risk occurs in a strategy when there is a lack of balance between two or more components. That is, there can be an element of risk between the strategic means and strategic ways—particularly if the means are too few and the ways too ambitious. In fact, imbalance between means and ways is the most common understanding of risk. "There is a 20% risk that we may not accomplish the course of action, given current

resources." But risk applies as well to the other two relationships. If there is a lack of balance between ways and ends, then there is a degree of risk that the contemplated methods will not accomplish the desired ends. Likewise, if there is imbalance between ends and means, then there is risk that the accomplished ends will not justify the expended means. Hence, risk is imbalance, and it applies to all three relationships within a strategy.

Feasibility, Acceptability, and Suitability.

We are now ready to examine the three relationships of strategy making more closely. To do so, we will make use of three terms that are commonly used to discuss strategy: feasibility, acceptability, and suitability. Collectively, these three ideas are referred to by the acronym 'FAS'.

The US Naval War College first used FAS as a way of analyzing strategy in 1942. In the Naval War College Green Book, Sound Military Decision, the writers stated that any proposed course of action should be examined for:

Suitability -- will its attainment accomplish the effect desired?

Feasibility -- can the action be accomplished by the means available? and

Acceptability -- are the consequences of cost justified by the importance of the effect desired? 19

In 1983, Keith Dunn and William O. Staudenmaier, then members of the Strategic Studies Institute of the US Army War College, further defined the FAS terms:

A military objective is considered suitable if, when achieved, it leads to a desired political effect.

A strategy may be considered feasible if it has a reasonable chance for success.

For a...strategic concept to be acceptable, it must achieve its military objective at a reasonable cost.²⁰

These definitions are useful, but they also betray a certain imprecision that limits their utility. First, the three definitions are not parallel. Suitability, we are told, relates to a "military objective", feasibility applies to a "strategy", and acceptability is paired with a "strategic concept". Clearly, we must fine-tune these terms if we are to apply them to the dialectic model. More importantly, in order to observe the deeper implications of the FAS idea, we must develop precise, parallel definitions.

The first step in developing these three terms is to overlay them on the dialectic model. See Figure 3. As shown, the three terms fit neatly along the lines among the strategic components. Hence, we can conveniently define the FAS terms as describing the relationships among the components. For the purposes of developing the dialectic theory of strategy, we shall define the FAS terms thus:

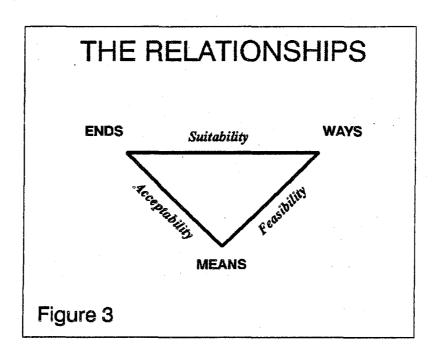
<u>Feasibility</u>: the relationship between the means and ways.

<u>Acceptability</u>: the relationship between the ends and means.

<u>Suitability</u>: the relationship between the ways and ends.

Through the use of the dialectic model, we have thus defined the FAS terms in such a manner that they are now parallel. That is, they each relate to the line between two components. Further, they each exclude the third component. They are thus not directly related to the third component, although as we will see, each of the relationships

impacts on the third element in an indirect but nonetheless significant way.



The FAS Arguments.

The utility of thus defining the FAS terms becomes obvious as we examine each of the relationships on the triangle. A pattern develops within each of the relationships that is at once common sense and yet crucial to understanding and analyzing strategy. We shall call these patterns the "FAS Arguments", because they consist of three logical arguments relating to the components of strategy. Specifically, each of the arguments aims at maximizing one of the strategic relationships (i.e., feasibility, acceptability, suitability) by manipulating its related components (i.e., ends, ways, means). Because we have provided precise, parallel definitions for the FAS terms, we will find that the resulting logical arguments are also parallel. This shared characteristic allows us to manipulate each of the three relationships

in order to shed light on the more profound aspects of a strategy's internal balance.

The Feasibility Argument. The feasibility argument is oriented to increasing the feasibility of the strategy in question. To illustrate the feasibility argument, we will begin by deliberately over-stating it, in order to bring out its unique perspective on the strategy. It is useful to imagine a staff officer--a strategic analyst--who is charged with improving the feasibility of a certain strategy under consideration by the National Command Authority. Let us conceive that this particular staff officer has no other concern--that is, he does not care about the strategy's acceptability or suitability. Rather, the more feasible the strategy is, the more successful his performance. Given this admittedly fictional setting, what would the staff officer argue for?

First, using the triangle, it is clear that the "feasibility staff officer" is directly interested only in the means and ways of strategy. He is not immediately concerned with ends. Having thus restricted the scope of his argument, we must determine what relationship between means and ways the feasibility staff officer will pursue. In order to increase the strategy's feasibility, he will argue for greater means and lesser ways. That is, since the officer's only concern is feasibility, he is interested in procuring the greatest amount of resources possible, because the more resources (i.e., the means) available, the more likely the strategic concept (i.e., the ways) will succeed. Conversely, he is also interested in restricting the methods, the actions, or the ways that will be executed. Clearly, from the perspective of feasibility, the fewer actions the strategic plan demands, the easier it will be to

fulfill the plan. Hence, the feasibility argument is for greater means and lesser ways.

The use of the adjectives "greater" and "lesser" demands some explanation. When applied to the means of strategy, "greater" and "lesser" are easy to understand. "Greater" indicates more money, more people, more time, more supplies, etc., and "lesser" indicates the opposite. But when applied to the concepts of ends and ways, these descriptors are more vague. For the purposes of dialectic strategy, the term "greater" is synonymous with "more ambitious, grandiose, challenging, or rigorous". For example, to seek the complete disarmament of an enemy state would be a greater end-state than to desire merely to punish a government for some wrongdoing. Similarly, a deep double-envelopment against an enemy army would represent a greater strategic way than a limited, probing attack. Likewise, "lesser" indicates ends or ways that are less demanding, less ambitious, more restrained.

The Acceptability Argument. Applying the same logic that we used with the feasibility argument, we can see what the "acceptability staff officer" might argue for. First, it is clear that the acceptability argument is not directly concerned with strategic ways. Instead, in line with the definition established above (see Figure 2), acceptability deals only with the relationship between ends and means. In order to cause maximum acceptability, this perspective argues for greater ends and lesser means. Again, common sense verifies the acceptability argument. Since acceptability is basically a cost-benefit analysis, a strategy becomes more acceptable the greater the ends achieved and the

lesser the means expended. "Greater" ends describe objectives that provide maximum payoff and benefit for the nation in terms of political gain, economic welfare, or military security. The acceptability perspective of strategy wants to attain the most favorable outcome at the least expense. Therefore, the acceptability argument is for greater ends and lesser means.

Suitability Argument. Finally, there is the suitability argument. What would the "suitability staff officer" argue for in his analysis of the strategy under consideration? Since suitability is the relationship between ways and ends, our staff officer is not concerned directly with means. His concern is that the strategic methods employed be sufficiently robust to attain the strategic ends. Hence, he will argue for greater ways and lesser ends. That is, the strategy will become more suitable the more ambitious the ways and/or the less challenging the ends. Therefore, the suitability argument is for greater ways and lesser ends.

It is at once clear that the three FAS arguments thus trade off against one another. In the past, the imprecise usage of the FAS terminology obscured this tradeoff relationship, to the detriment of good strategy making. But this peculiar relationship provides the key to understanding the dynamics and creative aspect of strategy. By increasing the feasibility of a given strategy, we might endanger the suitability of it and/or the acceptability of it. Feasibility will argue for greater means—an issue that immediately impacts upon the strategy's acceptability. Feasibility will also argue for lesser ways—

again impacting directly on the suitability argument. See the table below.

	ENDS	WAYS	MEANS
Feasibility	N/A	 .	+
Acceptability	.v	N/A	<u>-</u>
Suitability		+	N/A

By understanding this dynamic interaction of the strategic relationships, the analyst will be better able to consider tradeoffs in strategy making. When, for example, the NCA decides to restrict a strategic end-state in a given endeavor in order to improve the suitability of the strategy, the analyst knows from the strategic model that to decrease strategic ends directly imperils the acceptability argument. Both Congress and the American people may withdraw support from an operation if they believe that the means expended in the endeavor are not justified by a less glorious end-state. Hence, the analyst will consider whether the improvement in suitability is worth the decrement in acceptability. In this way, the strategist can seek to balance the three FAS arguments rather than focusing on only one of the relationships.

Now that we have seen the three FAS arguments, the element of risk becomes more clear. As stated above, risk is imbalance in one or more of the strategic relationships. If, for example, a given strategy features ambitious ends but restrained ways, we would deduce from our model that there is risk in the strategy's suitability. By considering

risk holistically--i.e., from the perspectives of all three relationships--the strategist can more comprehensively judge whether a given strategy is effective. To eliminate risk, the strategist must eliminate imbalance.

Some examples from history suffice to show the three FAS arguments and the risks that attend imbalance. The Athenians during the Pelopponesian War failed to create a feasible plan for the conquest of Syracuse. When Alcibiades urged the Athenians to try to conquer the most powerful city in Sicily, his political opponent Nicias advised against the enterprise. Although Nicias and, before him, Pericles saw the danger of over-extension, Athens ultimately proved the unfeasibility of their strategy...a strategy that Thucydides described thus: "What can be conquered must be conquered." The logical end-point of such a strategy is, of course, failure. Means fell short of ways at Syracuse, with the result that thousands of Athenians died for nothing.

At the operational level of war, we may cite the Market-Garden operation as a prime example of unfeasibility. Given the restricted means (primarily aircraft, trained paratroopers, air-droppable firepower, and maneuver rooom for the British XXX Corps), the proposed ways to turn the German defenses were too ambitious. Born of political machinations and a healthy disdain for frontal assaults against defended river-lines, the Market-Garden operation was suitable and acceptable in every sense. But, as the title of the recent book A Bridge Too Far suggests, the operation simply wasn't feasible.

The British encountered an acceptability problem in North America during the American War for Independence. Many in Parliament (including William Pitt the Elder) had argued in favor of the American actions

leading up to the break with England. But George III, ill advised by pro-war politicians, prosecuted a war against rebellion. In the end, Parliament decided that retention of the American colonies was simply not worth the tremendous cost of war. The Treaty of Paris in 1783 was the product of a failed acceptability argument.

American decision makers also became entangled with the acceptability problem during the Vietnam conflict. Not only was the American public unconvinced of the cost-benefit implications, even President Johnson concluded that the war against the communists was not worth the derailment of his social programs. The United States military left Vietnam not because further operations were unfeasible, nor because they had no suitable war plans (the invasion of North Vietnam was viable in this regard), but because in the eyes of the American public, costs exceeded benefit. The Vietnam war was unacceptable.

Advocates of strategic bombing frequently collide with the suitability argument. From Douhet and Mitchell down to today, air power enthusiasts have found to their dismay that bombing enemy cities does not lead to the accomplishment of political objectives. Air theories notwithstanding, wholesale destruction delivered from the air (a strategic way) does not in isolation lead to a political agreement (a strategic end). Even the capitulation of Japan after two of her cities were destroyed by nuclear weapons in World War II owes something to the Soviet conquest of Manchuria as well as to air attack. As late as the Gulf War of 1990-91, some air strategists failed to consider the suitability argument—primarily because they were mesmerized at how well air power satisfied the feasibility and acceptability pieces of the strategic equation.

Likewise, German strategists that advocated unrestricted submarine warfare in both of the world wars ran afoul of suitability. Like their aerial counterparts, these advocates of guerre de course believed that maritime strangulation would cause Great Britain to submit. Even while British and American naval power disputed the feasibility of such an approach, the suitability of it foundered on the rocks of international law and diplomacy. Indeed, rather than leading to the surrender of Britain, submarine warfare in both world wars had a part to play in the entry of the United States into the conflicts. What might have been a useful component of strategy if pursued with balance instead became a cassus belli.

Valuating the Relationships.

What does balance look like within a given strategy? One could deduce at this point that a strategy might indeed be too feasible—so feasible that either acceptability or suitability is imperiled.

Remembering that a strategy becomes more feasible the more means are used, the model clearly shows us that such feasibility comes only at the expense of acceptability. Conversely, the strategy's feasibility can grow as the ways are reduced. But reduced ways tend to threaten suitability. Hence, a strategy that is manifestly feasible may have hidden risk within the acceptability or suitability arguments. Likewise with each of the other relationships. In order to procure balance, the strategist must avoid solutions that are too feasible, too acceptable, or too suitable. Conceptually, when is balance achieved?

To shed some light on the question of balance, we can valuate the relationships. That is, we can assign an algebraic expression to them.

By referring both to the definitions of the FAS relationships as well as to Figure 2, we can develop these expressions thus:

Feasibility = Ways / Means

Acceptability = Means / Ends

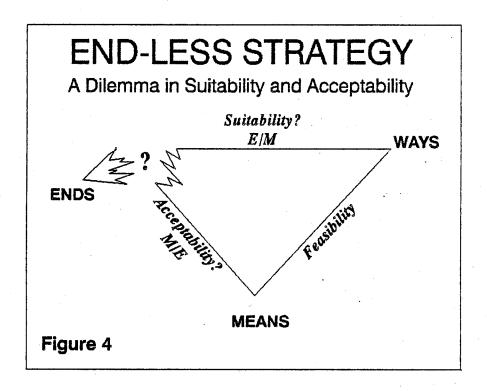
Suitability = Ends / Ways

By algebraically defining each of the relationships as one component divided by another, we can gain insights into the issue of balance. It is clear, for example, that if feasibility equals ways divided by means, and if it always argues for greater means and lesser ways, then as the equation approaches zero, the strategy becomes more feasible. The extreme of feasibility occurs when ways equal zero and/or means equals infinity. We should also examine, however, what occurs to the feasibility equation when the ways increase and the means decrease toward zero. The equation approaches infinity—a most unfeasible condition! When the means drop all the way to zero, we have a mathematically unsolvable dilemma: the strategy is infinitely unfeasible.

Since we have seen that one cannot adjust any of the relationships (i.e., the FAS arguments) without necessarily affecting at least one of the other two, it becomes clear that a balanced strategy is one in which the valuated relationships are equal. That is, if the valuated suitability relationship equaled, for example, ten divided by ten (the quotient being one), then balance demands that both feasibility and acceptability also equal ten over ten. If instead governmental policy demanded a more acceptable strategy—a value of eight means over a value of ten for ends—we can see that the increase in acceptability was purchased only through decreasing feasibility, which now has a value of

ten over eight. The result is not simply a more acceptable strategy; it is an unbalanced strategy with a measure of risk in the feasibility argument. The degree to which acceptability was improved matches the degree to which feasibility was degraded.

Using this method to conceptualize balance is useful when we consider a contemporary problem in strategy making—that of vague or nonexistent strategic ends. See Figure 4.



Since the Vietnam War, American strategists have vociferously proclaimed the importance of developing and understanding the desired end-state in national strategy.

[In Vietnam] the confusion over objectives...had a devastating effect on our ability to conduct the war. As Brigadier General Douglas Kinnard found in a 1974 survey of Army generals who had commanded in Vietnam, 'almost 70 percent of the Army generals who managed the war were uncertain of its objectives.'²¹

The army's latest fighting doctrine reiterates the point clearly:

When the nation commits its armed forces, it should clearly understand the overall policy goal and how the use of force helps achieve that goal...Therefore, military planners must understand the desired military end state to be achieved as part of the overall strategy...Determining the end state and ensuring that it accomplishes the national objectives are the critical first steps in the operational planning process.²²

But if defining and understanding the ends of a strategy are so important, what happens to the strategy if we fail to do so? What is the risk that our doctrine is trying to avoid? We can begin to see the dilemma of an "end-less" strategy if we consider what happens to the suitability equation. In short, if we cannot ascertain a value for the strategic ends, we cannot "solve for x", so to speak. We cannot clearly evaluate the suitability of the strategy. Alternately, if we assign a value of zero to the strategic ends—in other words, if the strategy had no end-state—we would find a completely suitable strategy. The strategic ways employed would be perfectly suited to achieving nothing. In a sense, they could not fail! This claim seems absurd and tongue—incheek, but it provides clues to real strategic problems.

We have seen above that the strategic ends provide the raison d'etre for the strategy as a whole. The ends are the basis for measuring success. But where no ends are developed, strategists, commanders, and government officials will have to cast about for some other basis for measuring success. With no clear ends the only other candidates for measuring success must be found within either the strategic ways or strategic means. This condition was evident in Vietnam. Since they could not examine what was being accomplished (ends), officials instead pointed to what was being done (ways), and what was being spent (means). Concurrently, observers could garner data

likewise on enemy ways and means. Strategic success, then, became a measurement of our activity compared to enemy activity, and our expenditures (in blood and treasure) compared to the enemy's expenditures. If the armed forces appeared to be highly active, such activity was interpreted as indicative of success. Conversely, if the enemy showed an unexpected capacity for action (regardless of the results achieved)—as during the 1968 Tet Offensive—then the activity was viewed as pointing toward American failure. Likewise, the brutal statistics of deaths inflicted compared to those received represented a desperate attempt to compensate for an unclear objective. Such effete measurement is one of the results of an unclear end-state. When serving an end-less strategy, even battlefield victories mean little. They are, in fact, an illusion of success.

But the problem of end-less strategy gets worse when viewed from the perspective of acceptability. Since acceptability equals means expended divided by ends accomplished, the equation becomes unsolvable. Since a zero as a divisor results in a quotient of infinity, an end-less strategy is infinitely unacceptable, as Lyndon B. Johnson discovered to his ruin.

The same unfortunate dynamic was evident as well in Somalia in 1993. The sudden loss of a small number of coalition lives led to a strategic reverse for the United States. With no clear end-state in view, Americans could not reconcile themselves to the loss of US soldiers. To enter into a conflict without a well-developed and well-publicized end-state is to invite an acceptability disaster.

The Dialectic of Strategy.

The thesis of this monograph is that the three levels of strategic analysis should operate according to dialectic logic. Appendix A contains a brief review of the etymology and history of the dialectic. But the salient point is that dialectic logic is the process of reasoning through dialogue. That is, it is a method of analyzing a subject by constructing a series of antithetical arguments and then resolving the resulting conflicts or paradoxes.

For example, if the management of a certain business were considering the purchase of a new computer system, they might simply try to decide objectively whether the system would be cost-effective. This type of decision making would not be dialectic. In order to make the decision dialectically, the management would construct two distinct, contradictory arguments. The first argument would be that the business must purchase the new system, because it would be cost-effective to do In support of this argument, a team of analysts would assemble evidence and argue in favor of the purchase. Another team would develop an antithetical position -- a counter-argument that the purchase would not be cost-effective. They also would develop their case with evidence and reasoning. Hence, the management has now constructed a dialectic. They have viewed the problem from two contradictory standpoints. The final step is for the boss to resolve the contradiction by making a decision in favor of one of the arguments or, perhaps, a decision for a compromise solution.

Dialectic logic is thus useful in order to draw out extreme statements or propositions by which alternate propositions can be more clearly understood. In a sense, dialectic logic is no more than a systematic way of applying disciplined intellect to a problem. Rather

than following an initial impulse or a one-dimensional interpretation of a problem, the analyst that uses the dialectic forces himself to consider a problem from different angles. Clearly, such methods have great utility in strategy making today.

Carl von Clausewitz had studied Kantian philosophy, 23 was probably influenced by Hegelian thought, 24 and used the dialectic process to arrive at his understanding of war. 25 He believed that military strategy consisted of both purpose (i.e., ends) and means, and that to synthesize the two, the strategist developed concepts (i.e., ways).

Art is a developed capacity. If it is to express itself, it must have a purpose, like every application of existing forces, and to approach this purpose it is necessary to have means...To combine purpose and means is to create. Art is the capacity to create; the theory of art teaches this combination [of purpose and means] to the extent that concepts can do so. Thus, we may say: theory is the representation of art by way of concepts.²⁶

Although Clausewitz does not explicitly state his use of dialectic logic, he implies the idea here through the use of the terms "purpose", "means", and "concepts". Hence, Clausewitz deduced two important notions concerning strategy. First, he perceived the three components discussed above--ends, ways, and means. Secondly, using dialectic logic, he saw that the ends and means of strategy were inherently opposed, in a sense contradictory. The means, before they are expended through some effort on the part of the state, represent the "potential energy" of strategy. By themselves, these means produce nothing and remain inert. The ends of strategy, on the other hand, represent the opposite end of both accomplishment and energy. Ends are attained through some sort of enterprise, and they require the expenditure of means. Hence, the ends and means of strategy are antithetical, contradictory, opposed. Clausewitz proposed that these two opposites

are brought together through the synthesis of strategic ways. His hypothesis is striking: the components of strategy form a dialectic.

We should note here that the dialectic nature of strategy is not confined to the first level of strategic analysis as discussed in this paper. The same dynamic is clearly in operation in the second and third levels of analysis as well. When determining whether linkage exists between a strategy and a superordinate strategy, for example, the analyst might look at the dialectic that forms between means made available from a higher headquarters and the means required by a subordinate headquarters. Often, means available and means required are contradictory. The contradiction is resolved through a synthesis process that creates a new thesis. (This process is represented in the budgeting cycle in the United States.)

Likewise, the dialectic phenomenon is seen at the third level of strategic analysis—in the confrontation between a friendly and an enemy strategy. In this case, the friendly strategy might be viewed as a thesis that is rigorously opposed by the enemy strategy, the antithesis. In this case, the synthesis is derived through violence. The battle, the campaign, and ultimately the war become the synthesis. The new thesis is presented, so to speak, in the treaty (or other form of resolution) that ends the conflict.

The thesis of this monograph is that the first level of strategic analysis—the search for balance within a strategy—can also benefit from a dialectic perspective. The general meaning of dialectic is the search for truth through conversational logic. In this way, the first level of strategic analysis calls for the strategist to "question" each proposed component of a strategy in terms of its effect on the two

relationships that join the component to the other components. For example, when analyzing a particular strategy, the analyst considers the strategic ends by considering their effect on the acceptability and the suitability of the strategy. This method insures a balanced approach to strategic ends, because the acceptability argument will call for greater ends, while the suitability argument will call for lesser.

The use of our fictional "FAS staff officers" in analogous to Plato's use of dialogues in order to bring out greater truth. Likewise, the strategist that desires to analyze a strategy should carry on a sort of logical dialogue—a dialectic—by considering the competing arguments of feasibility, acceptability, and suitability. In this way, he can apply intellectual rigor to his analysis and force himself away from the danger of seeing strategy from only one perspective. Further, as noted above, he can employ the dialectic in order to sense potential imbalance within a strategy. When a given plan is shown to be extremely acceptable, the strategist uses the dialectic to consider whether acceptability causes imbalance and risk within either suitability or feasibility.

Clausewitz' contribution to strategic theory is limited in this regard. His perception of the strategic dialectic is merely implied and incomplete. Since he pursued only Hegel's restrictive interpretation and process of dialectic logic, and since he invariably viewed strategic ends as the thesis, the means as the antithesis, and the ways as the synthesis, his model has limited utility. In keeping with his Prussian sympathies, he viewed the ends of strategy as something that, for the military strategist, were immutable or at least difficult to influence. The head of state chose the ends, not the military strategist.

Likewise, the means of strategy were beyond the purview of the strategist. Resources were provided from and by the state and could not be readily influenced by the military officer. Hence, the only component of strategy that the strategist could control was the ways. The soldier's job, then, was to synthesize the two fixed points of strategy (ends and means) by manipulating the ways. This notion gives rise to the false idea that the development of strategic ways is the only opportunity for creativity in strategy making.

In modern usage, however, the dialectic idea must evolve to embrace all the relationships of strategy. In other words, rather than starting with the strategic ends, one might just as well view the ways as the thesis and cast the ends in the role of the antithesis. To resolve the contradiction between the ways and ends, the strategist seeks to manipulate the means. Alternately, one could view the means as the thesis, the ways as the antithesis, and then formulate the ends to resolve contradiction. This concept is foundational to the functioning and interpretation of the dialectic model: when two components of strategy are found to be in opposition, the contradiction is resolved by manipulating the third component.

Some examples would help to clarify the dialectic arrangement.

Suppose that in a given conflict, a national government determines to annex a disputed province in a war with a neighboring state. The strategic end-state, then, is annexation of the province (thesis). The minister of war, having studied the problem, states that in order to achieve the desired end-state, the armed forces would have to both defeat the enemy armed forces and then occupy the disputed region with troops. Unfortunately, the standing armed forces are not currently

capable of defeating the enemy. Instead, at current strength levels, the only feasible operation would be a series of limited, probing attacks followed by tactical defenses astride key lines of communication. This limited strategy of position would represent the strategic ways (antithesis). Clearly, there is a contradiction between ends and ways. The contemplated plan, even if it were successful, would not lead to the desired end-state, but instead would probably lead to a protracted, indecisive stalemate. The ways are not ambitious enough; they are unsuitable and antithetical to the ends. The solution, according to the dialectic principle, is to be found by manipulating the third component, the means. We can see that there are two basic options available. The means can be changed in one of two ways: they can be increased or decreased. If they are increased, they will effect a direct change in the ways; if they are decreased, they will instead work directly on the ends. To illustrate the first example (i.e., increasing the means), the head of state calls up military reserves. With the increased strength provided by the reserves, the minister of war concludes that he can conduct a battle of annihilation against the enemy and then occupy the province. An increase in means allowed an increase The antithetical relationship between the ends and ways is resolved through the increase of strategic means. Alternately, the means could be maintained at a low level of expenditure or even reduced further. According to the acceptability argument, the small expenditure of means allows government officials to pursue less grandiose strategic ends. In this example, the head of state decides that it would be acceptable merely to coerce the enemy state to grant commercial rights in the disputed province. Decreased means permitted decreased ends.

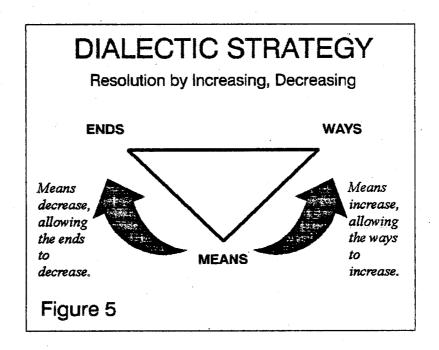
The logic to this process is shown in the following table.

THESIS	ANTITHESIS	PROBLEM	SYNTHESIS (+)	SYNTHESIS (-)
Ends	Means	Ends are not ambitious enough to justify costs. Strategy is unacceptable.	Ways are increased, producing more ambitious ends.	Ways are decreased, reducing the need for means.
Means	Ways	Means are insufficient to resource the ways. Strategy is unfeasible.	Ends are increased, justifying an increase in means.	Ends are decreased, allowing for less ambitious ways.
Ways	Ends	Ways are inadequate to produce the desired ends. Strategy is unsuitable.	Means are increased, allowing more ambitious ways.	Means are decreased, permitting less ambitious ends.

In order to use this model, the strategist must first understand which two components of strategy are in opposition. Then, he must consider the third component from two perspectives. First, the third component may be increased. If it is, it will directly affect the component found in a counterclockwise position on the dialectic model. See Figure 5. If, on the other hand, the third component is decreased, it will directly affect the component found in the clockwise direction.

In the figure, the ends and ways of a given strategy are contradictory. The strategy is unsuitable. The strategist solves the problem by manipulating the third component—in this case, the means. He has two fundamental alternatives: he can increase the means, or he can decrease them. If he increases the means, the immediate effect is to allow for greater ways—ways that are ambitious enough to accomplish

the desired ends. The strategy would therefore be suitable. If he instead decreased the means, the direct effect is to allow for less grandiose ends. When the ends are decreased, again the suitability problem is solved.



To take another example, let us suppose that a regional commander-in-chief is planning an operation in a given theater of operations. The governmental authorities have given the commander a fixed amount of means in terms of men and materiel (the thesis). The commander is directed to seize an enemy capital and capture the opposing head of state (the strategic ways—the antithesis). Analysis reveals, however, that the operation is unfeasible: the means do not match the ways. At best, the commander foresees that he can defeat enemy armies defending along a strategic line of operation. Again, the contradiction between two components of strategy (the means and ways) are resolved by

manipulating the third component (the ends). According to our theory, the ends can be either increased, hence allowing for greater expenditure of means; or the ends can be decreased, permitting less challenging ways. In this case, the government decides to develop less ambitious strategic ends. The new end-state will aim at a negotiated settlement following the defeat of the enemy's armies along the line of operation. Hence, the commander is free to pursue his more feasible operation. The change in ends facilitated a correction of the antithetical relationship between means and ways.

By applying dialectic logic to the relationships among the three components of strategy, the decision maker can attempt to infuse balance in the resulting plan. Further, he can view the strategy from the perspective of each of the relationships (ends-ways, ways-means, means-ends) and correct any contradictions by manipulating the third component. While such methods do not serve as a panacea for strategic problem-solving, they do provide a way to objectively view competing strategies from different, disciplined perspectives.

Conclusions.

According to Plato, a man by the name of Chaerephon approached the Oracle of Delphi and asked the identity of the wisest man in the world. The Oracle responded that Socrates was the wisest. When Socrates heard of this response, he was surprised and incredulous. He began to question those around him-especially those considered the most wise--in order to disprove the Oracle's contention. Instead, he found that his questions often penetrated the thin veneer of didactic truisms and

discovered infinitely more profound understanding.²⁷ Disciplined questioning from different perspectives gave rise to learning.

Just as the dialectic of the ancient world led to greater understanding in philosophy and epistemology, so also it provides the key to greater achievement in strategy making. So often history laments nations or leaders who suffered from strategic tunnel-vision--the inability to see reality from a different perspective. One could postulate that virtually every strategic failure in history had at its root imbalance in feasibility, acceptability, or suitability. To overcome this problem, it would be fruitless to appeal to the intangible objectivity within the strategist. Objectivity comes and goes, often riding on a wave of emotion until it crashes on the jagged rock of a crisis. In the moment when it is most needed, objectivity is not to be found.

Instead of thus pinning our hopes to vague admonitions about human character, we can develop, refine, and employ theoretical models. Such models, like the dialectic model discussed in this monograph, serve not to produce inflexible answers, but rather to suggest relevant, disciplined questions. The strategist uses the model to force himself to consider the problem from different angles. By following a logical dialogue within himself, he learns to master the tradeoffs found among the components and relationships of strategy. He learns that, just as in chess, every move gains something and also loses something. One aspect of strategy can be improved only through the degradation of another aspect. This is not to suggest that the best one can hope for is to mark time. Most chess games eventuate in a checkmate. Likewise, strategy making, although bounded by inevitable tradeoffs, also can move

forward to victory. Such tradeoffs are not a serious problem if the strategist understands them and applies his intellect and creativity to balance them. The purpose of the dialectic model is to assist in the attainment of such balance.

APPENDIX A:

THE DIALECTIC -- FROM ZENO TO HEGEL

This essay purports that strategic analysis at all three levels (internal balance, external linkage, and effective opposition) should operate according to dialectic logic. In order to show the dialectic dynamic within a strategy, it is necessary to briefly review the history and development of the dialectic.

The term dialectic derives from the Greek "DIA-", meaning "through" or "by means of", and "LOGOS", meaning "word", "communication", or "speech". 28 When applied to logical processes, then, dialectic indicates a process of reasoning that employs conversation or dialogue. 29 The term was invented by Aristotle, but he in turn recognized that Zeno of Elea first demonstrated the technique. 30

Zeno. Zeno was a pre-Socratic philosopher of the Eleatic School from the fifth century BC who is famous for his use of paradoxical logic. Though his conclusions have not gained acceptance, Zeno's method of reasoning still merits attention by philosophers and logicians today. His best known paradox described a race between Achilles and a tortoise. Achilles was able to run ten times faster than the tortoise, but the tortoise had a head start of ten units of distance. Zeno argued that Achilles would never pass the tortoise, because each time he reached the place where the tortoise was, the tortoise would have advanced one tenth the distance that Achilles had run. Hence, Achilles could never catch the tortoise. Such paradoxical arguments are not just fascinating brain-teasers. Rather, Zeno's method of analyzing an argument,

searching for contradiction, and then developing a conclusion was the first example in history of the dialectical process.

Socrates. Socrates, the son of an Athenian sculptor, lived from 469 to 399 BC. He did not give formal instruction after the fashion of other philosophers of his time, but went about engaging people in conversation, seeking, chiefly by questions, to induce his contemporaries to think clearly and to act reasonably. He made profession of no knowledge except of his own ignorance, and he therefore sought to draw out truth through the questioning of those who proposed to have wisdom. By this method, Socrates could point up the fallacies and contradictions in the propositions of others. His contribution to the dialectic was his rigorous questioning of statements or theses. Though he wrote nothing, the Socratic tradition was preserved by his disciples Xenophon and Plato. 31

Plato. Plato, who lived c. 428 through 347 BC, laid down the foundation for the dialectic process through the writing of his famous dialogues. Though he avoided the civic life of Athens, Plato was widely traveled and well respected, and he is said to have been consulted by statesmen. He established a school of philosophy in a garden in Athens, and here he spent the last forty years of his life teaching and writing. Most of the twenty-six dialogues feature the development and criticism of ideas through conversation among various people. 32 But the formalization of the dialectic was left to one of Plato's students, Aristotle.

Aristotle. Aristotle was born in 384 BC in Stagira in northern Greece. In 367, Aristotle went to Athens to join Plato's Academy, first as a student, then as a teacher. Plato had gathered around him a group of outstanding men who worked in a wide variety of subjects, ranging from medicine and biology to mathematics and astronomy. They shared no common doctrine but were united by the systematic effort to organize human knowledge on a firm theoretical basis and expand it in all directions. This effort, more than anything else, characterizes Aristotle's own work.

It was also part of the Academy's program to train young men for a political career and to provide advice to rulers. Thus, after Plato's death, Aristotle joined (347) the court of Hermias of Atarneus, and later went (343) to the court of Philip II of Macedonia, where he became tutor to the young Alexander the Great. In 335, Aristotle returned to Athens to found his own school, the Lyceum, or Peripatus. Whereas the Academy had become rather narrow in its interests since Plato's death, the Peripatus under Aristotle and his successor pursued a wider range of subjects than the Academy ever had. In particular, prominence was given to the detailed study of nature. After the death of Alexander the Great in 323, anti-Macedonian feeling in Athens rose, and Aristotle retired to Chalcis, where he died the following year.

Aristotle continued in Plato's methods of logic, but he also developed the dialectic process into a rigorous, disciplined method of analysis. In his "Topics and Sophistical Refutations", Aristotle asserted that dialogue was the appropriate form for philosophical argument and proceeded to instruct his readers on how to develop skill

in dialectic thinking.³³ It is this perspective that we will apply to strategic analysis.

Kant. Immanuel Kant was born in Konigsberg, East Prussia in 1724. He entered the city's university with the intention of studying theology, but he gradually developed many other interests related to learning and epistemology. He continued at the university as a tutor and eventually a professor, and in the last fifteen years of his life, he wrote down his philosophical system in a series of books. His major contribution to the dialectic process is found in *Critique of Pure Reason* (1781), in which he arranged the four contradictions of pure reason as four sets of theses and antitheses.

Fichte. Johann Gottlieb Fichte, who lived from 1762 to 1814, was a German transcendental idealist philosopher. He studied theology and philosophy at the universities of Jena and Leipzig and then became a private tutor. Fichte admired the works of Kant and wrote justifications of the latter's conclusions. His writings also influenced the development of German nationalism. But Fichte's contribution to the dialectic was his use of the term "synthesis" to describe the process by which the contradiction between thesis and antithesis is resolved. This idea was further developed by F.W. J. von Schelling and later by Hegel.

Hegel. Georg Wilhelm Friedrich Hegel was the greatest of the German idealists and lived from 1770 to 1831. He was a university lecturer and professor of philosophy for most of his life. In his later

years, he came to idealize the Prussian state and said that it represented the highest form of political organization. Hegel was influenced by Kant and the post-Kant idealism movement. He was also strongly influenced by Christianity and German Romanticism. Fundamental to Hegel's philosophy was the idea that all things were inter-related and were all part of the "Absolute Idea". Hence, something could be understood only in terms of how it related to the whole. As a result, Hegel developed dialectic logic -- a process by which man deduces from his experience the categories of truth that lead to the absolute truth. dialectic begins to operate with the proposal of a thesis, a statement of truth. Opposed to this thesis is a contradictory statement, the antithesis. By resolving this contradiction, man arrives at the synthesis, a logical resolution of opposites. The synthesis then becomes a new thesis, and the dialectic process begins anew, continuing throughout time until mankind reaches the last synthesis -- the Absolute Idea, 34

ENDNOTES

1 John Collins, Grand Strategy: Principles and Practices, (Annapolis, MD: US Naval Institute, 1973), pp. 14-21. ² Rear Admiral J.C. Wylie, Military Strategy: A General Theory of Power Control, (New Brunswick, NJ: Rutgers University Press, 1967), passim. 3 B.H. Liddell Hart, Strategy, (London: Faber & Faber Ltd., 1954), passim. John Collins, op cit. ⁵ Mao Tse-Tung, Selected Writings, (Ft. Leavenworth, KS: USACGSC, 1991), passim. 6 Lawrence Freedman, "The First Two Generations of Nuclear Strategists", Makers of Modern Strategy: from Machiavelli to the Nuclear Age, Peter Paret, ed., (Princeton, NJ: Princeton University Press, 1986), 735-78. 7 Elements of this thesis derive from Robert R. Leonhard, "Dialectic Strategy", an unpublished MS. Webster's Ninth New Collegiate Dictionary. (Springfield, Mass.: Merriam-Webster Inc., 1990), p. 1165. 9 David Jablonsky, Why is Strategy Difficult? (Carlisle, PA: Strategic Studies Institute, USAWC, 1992), p. 6. Cf. also James J. Schneider, "Theoretical Paper No. 3: The Theory of Operational Art," (Fort Leavenworth, KS: USACGSC, 1988), p. 16ff. Schneider includes risk as a component along with ends, ways, and means. But as shown elsewhere in the monograph, the dialectic model uses the term risk to describe imbalance within the three relationships. Hence, while some, like Schneider, view risk as a component, this paper views it as a condition that may appear within any or all of the three relationships. 10 Carl von Clausewitz, On War. (Princeton, NJ: Princeton University Press, 1976), pp. 80-81. 11 Arthur F. Lykke, Jr., "Toward an Understanding of Military Strategy", Military Strategy: Theory and Application. (Carlisle, PA: USAWC, 1989), p. 4. 12 FM 100-7 The Army in Theater Operations (Draft), (Ft. Monroe, VA: HQ, TRADOC, 1990), pp. 2-8 thru 2-9. 13 David Jablonsky, Why is Strategy Difficult?. (Carlisle, PA: USAWC, Strategic Studies Institute, 1992), p. 6. 14 Arthur F. Lykke, Jr. ed., Military Strategy: Theory and Application. (Carlisle, PA: USAWC, 1989), p. 3. 15 FM 100-5, Operations. (Washington DC: HQDA, 1993), p. 6-1. 16 FM 100-7, The Army in Theater Operations. (Washington DC: HQDA, 1990), p. 1-10. 17 U.S. Navy, Sound Military Decision. (Newport, R.I.: U.S. Naval War College, 1942), p. 3. 18 Field Marshal Sir William Slim in an address to the US Army Command and General Staff College, 1952. 19 U.S. Navy, Sound Military Decision. (Newport, R.I.: U.S. Naval War College, 1942), p. 30. $^{\rm 20}$ Keith A. Dunn and William O. Staudenmaier, "Strategy for Survival", Foreign Policy Fall, 1983, pp. 29-34.

²¹ Harry G. Summers, Jr., On Strategy: a critical analysis of the Vietnam War, (New York: Dell Publishing, 1982), p. 149.
22 FM 100-5, Operations. (Washington DC: HQDA, 1993), p. 6-1. 23 Peter Paret, "The Genesis of On War", Carl von Clausewitz, On War. (Princeton, NJ: Princeton University Press, 1976), p. 14. ²⁴ Bernard Brodie, "A Guide to the Reading of *On War*", Carl von Clausewitz, On War. (Princeton, NJ: Princeton University Press, 1976), p. 643.
 Jablonsky, *ibid.*, p. 6. 26 Clausewitz, "Art and Theory of Art", W. M. Schering, Geist und Tat (Stuttgart, 1941) as quoted in Paret, ibid., p.14. 27 Plato, Apology, Benjamin Jowett, trans., as quoted in Great Literature (Parsippany, NJ: Bureau Development, Inc., 1992).

28 Harold K. Moulton, ed., The Analytical Greek Lexicon Revised. Rapids: Zondervan Publishing House, 1977, pp. 90 and 248. 29 Webster's Ninth New Collegiate Dictionary. Springfield, Mass.: Merriam-Webster, Inc., 1990, pp. 349-50. 30 J. T. Moore, "Dialectic", The Software Toolworks Multimedia Encyclopedia. Novato, CA: Grolier Electronic Publishing, 1992.
31 Benjamin Jowett, "Introductory Note to Plato's Apology", Great Literature, (Parsippany, NJ: Bureau Development, Inc., 1992). 32 L.A. Kosman, "Plato," The Software Toolworks Multimedia Encyclopedia. Novato, CA: Grolier Electronic Publishing, 1992.

33 Michael Frede, "Aristotle," The Software Toolworks Multimedia Encyclopedia. Novato, CA: Grolier Electronic Publishing, 1992.

34 Richard Osborne, Philosophy for Beginners. New York: Writers and Readers Publishing, Inc., 1992. pp. 108-114.

BIBLIOGRAPHY

Books

- Art, Robert J., Strategy and Management in the Post-Cold War Pentagon. Carlisle Barracks, PA: Strategic Studies Institute, USAWC, 1992.
- Atkinson, Alexander, Social Order and the General Theory of Strategy. London: Routledge & Kegan Paul, 1981.
- Builder, Carl H., The Masks of War: American Military Styles in Strategy and Analysis. Baltimore: Johns Hopkins University Press, 1989.
- Clausewitz, Carl von, On War. Princeton, NJ: Princeton University Press, 1976.
- Collins, John, Grand Strategy: Principles and Practices. Annapolis, MD: US Naval Institute, 1973.
- Davis, Paul K., Game-structured Analysis as a Framework for Defense Planning. Santa Monica, CA: Rand, 1988.
- Elting, John R., The Superstrategists: Great Captains, Theorists, and Fighting Men Who Have Shaped the History of Warfare. New York: Scribner, 1985.
- Field Manual 100-5, Operations. Washington DC: HQDA, 1993.
- Field Manual 100-7 The Army in Theater Operations (Draft). Fort Monroe, VA: HQTRADOC, 1990.
- Gray, Anthony W., *Military Strategy*. Washington, DC: National Defense University, 1983.
- Gray, Colin S., War, Peace, and Victory: Strategy and Statecraft for the Next Century. New York: Simon and Schuster, 1990.
- Guertner, Gary L., The Search for Strategy: Politics and Strategic Vision. Westport, CN: Greenwood Press, 1993.
- Halle, Louis Joseph, The Elements of International Strategy: A Primer for the Nuclear Age. Lanham, MD: University Press of America, 1984.
- Hart, B.H. Liddell, Strategy. London: Faber & Faber Ltd., 1954.
- Jablonsky, David, Why is Strategy Difficult? Carlisle Barracks, PA: Strategic Studies Institute, USAWC, 1992.
- Johnstone, Henry M., The Foundations of Strategy. London: G. Allen & Unwin, 1914.
- Kennedy, Paul M., Grand Strategies in War and Peace. New Haven: Yale University Press, 1991.

- Lykke, Arthur F., Military Strategy: Theory and Application: A Reference Text for the United States Army War College. Carlisle Barracks, PA: USAWC, 1989.
- Matloff, Maurice, Strategic Planning for Coalition Warfare. Washington: Office of the Chief of Military History, Dept. of the Army, 1953-59.
- Mao Tse-Tung, Selected Writings. Fort Leavenworth, KS: USACGSC, 1991.
- McDonald, John D., Strategy in Poker, Business, and War. New York: Norton, 1950.
- Orvik, Nils, Teaching Strategic Studies. Kingston, Ont.: Centre for International Relations, Queens University, 1978.
- Paret, Peter et al., eds., Makers of Modern Strategy: From Machiavelli to the Nuclear Age. Princeton, NJ: Princeton University Press, 1986.
- Plato, Apology. Benjamin Jowett, trans. as found in Great Literature. Parsippany, NJ: Bureau Development, Inc., 1992.
- Schelling, Thomas C., The Strategy of Conflict. Cambridge: Harvard University Press, 1960.
- Schneider, James J., "Theoretical Paper No. 3: The Theory of Operational Art." Fort Leavenworth, KS: USACGSC, 1988.
- Sound Military Decision. Newport, RI: USNWC, 1942.
- Summers, Harry G., Jr., On Strategy: a critical analysis of the Vietnam War. New York: Dell Publishing, 1982.
- Swingle, Paul G., The Structure of Conflict. New York: Academic Press, 1970.
- Trachtenberg, Marc, The Development of American Strategic Thought. New York: Garland Publications, 1987.
- Wylie, Rear Admiral J.C., Military Strategy: A General Theory of Power Control. New Brunswick, NJ: Rutgers University Press, 1967.